

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-011514

DIRECT TESTIMONY OF WILLIAM G. JOHNSON

REPRESENTING AVISTA CORPORATION

Exhibit T____ (WGJ-T)

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I. Introduction

Q. Please state your name, business address, and present position with Avista Corporation.

A. My name is William G. Johnson. My business address is East 1411 Mission Avenue, Spokane, Washington, and I am employed as a Senior Power Supply Analyst in the Energy Resources Department.

Q. Please state your educational background and professional experience.

A. I graduated from the University of Montana in 1981 with a Bachelor of Arts Degree in Political Science/Economics. I obtained a Master of Arts Degree in Economics from the University of Montana in 1985. I started working for Avista in April 1990 as a Demand Side Resource Analyst. I joined the Energy Resources Department as a Power Contracts Analyst in June 1996. My primary responsibilities include the evaluation of the company’s long-term electricity supply options.

Q. Please summarize your testimony?

A. My testimony will describe the power cost deferral mechanism that Avista has used to calculate the increase in power supply expense and quantify the factors that contributed to the deferrals. I am sponsoring Exhibit Nos. ____ (WGJ-1) through ____ (WGJ-8), which I will introduce as I refer to them in my testimony. A table of contents for my testimony is as follows:

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II. Overview of Power Cost Deferral Calculations

The Company has used two different methods to quantify the changes in power supply expenses. For the months of July 2000 through November 2000 the Company used a model that

1 calculated net power supply expenses based on actual generation, actual fuel prices and actual
2 average short-term energy purchase and sales prices. This model calculated the Company's net
3 energy purchases based on the authorized level of obligations included in the Company's last
4 general rate case. Modeled quantities of purchase and sales energy were multiplied times the
5 Company's actual average short-term energy prices to determine net energy purchase expense.
6 Net purchase expense plus actual fuel costs were compared to the authorized levels to determine
7 the change in net power supply expense on a system basis. The Washington allocation of the
8 expense change was the power cost deferral for the month.

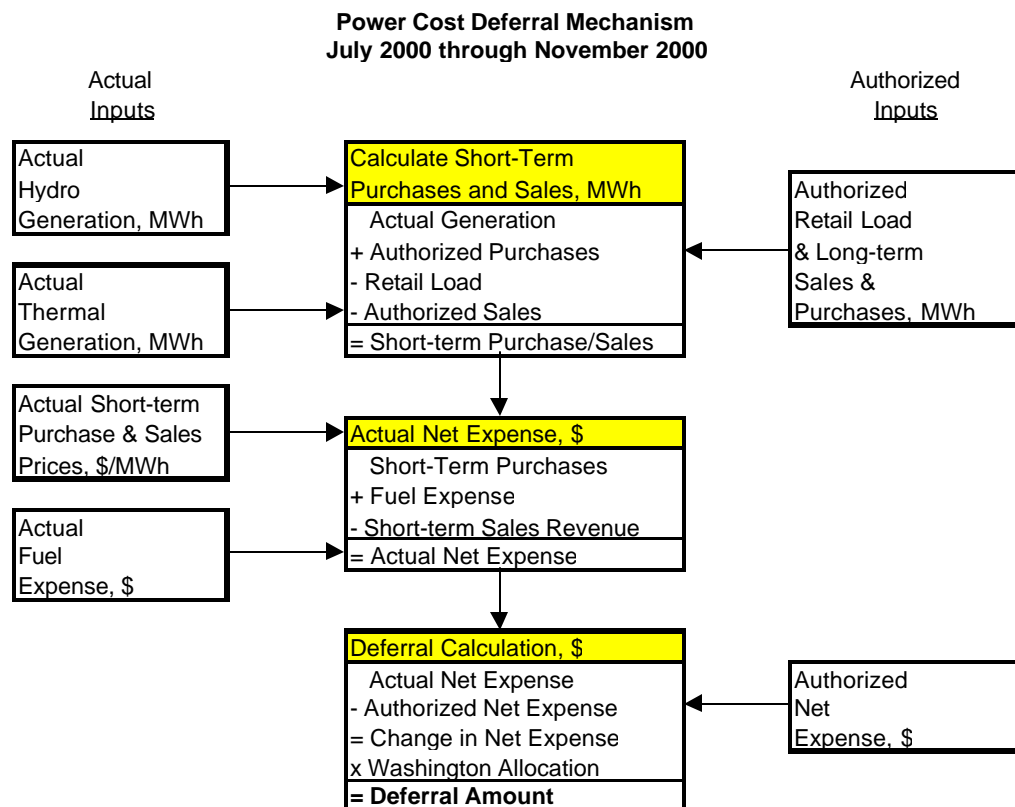
9 On December 21, 2000, the Company petitioned the Commission to change the
10 methodology for calculating the power cost deferral. The methodology was changed to capture
11 the effect of retail load and wholesale load changes on the Company's expenses. The
12 Commission granted permission to change the methodology on January 24, 2001, effective for
13 calculations beginning in December 2000. The current methodology compares the actual and
14 authorized amounts in FERC accounts 555 (Purchased Power), 501 and 547 (Fuel) and 447
15 (Sales for Resale) to compute the change in power supply expense. This methodology also
16 includes a retail revenue adjustment to account for the revenue offset to the power supply costs.
17 When retail loads increase above authorized levels, net power supply costs increase. An increase
18 in retail revenue is recorded in the deferral calculation as an offset to increased power supply
19 costs to serve the increase in retail load. Likewise, a decrease in retail revenue is recorded as an
20 offset to the reduced power supply costs resulting from serving a reduced retail load.

21 **III. Description of Deferral Mechanism July 2000 – November 2000**

22 Q. Would you please describe the deferral mechanism that was used for the July
23 2000 through November 2000 period?

24 A. Yes. The deferral mechanism in place for the July 2000 through November 2000
25 period calculated the increase in the Company's power supply expenses based on changes in
26 hydro and thermal generation, fuel prices and short-term market prices. In general, the actual

1 level of net power supply expenses (purchases plus fuel minus sales) in each month was
 2 compared to the authorized net power supply expense for the month. The difference in system
 3 expense was multiplied by the Washington allocation of 66.99% to determine the deferral
 4 amount. The illustration below shows the function of the deferral mechanism used during the
 5 July through November period. The deferral calculations for the period July 2000 through
 6 November 2000 are shown on Exhibit ____ (WGJ-1).



7 Q. What is included in the calculated Actual Net Expense?

8 A. The Actual Net Expense includes the net purchase expense (short-term
 9 purchases minus short-term sales) plus actual fuel expense. The net purchase expense is
 10 determined by first calculating the Company's net energy position during heavy load and light
 11 load hours. The energy position is determined by subtracting resources, consisting of actual
 12 hydro and thermal generation and authorized long-term purchases from the authorized
 13 obligations (retail load plus long-term sales). If resources exceed obligations then the Company

1 is a net seller. If obligations exceed resources then the Company is a net purchaser. If the
2 Company is a seller, the megawatt-hours of sale energy are multiplied by the average system
3 short-term sales price to determine short-term sales revenue. If the Company is a purchaser, the
4 megawatt-hours of purchase energy are multiplied by the average system short-term purchase
5 price to determine short-term purchase expense. Actual Net Expense is the sum of short-term
6 purchase expense plus fuel expense minus short-term sales revenue.

7 Q. How were the average system short-term purchase and sales prices determined?

8 A. The average short-term purchase and sales prices were determined by averaging
9 all of the Company's short-term system purchases and sales in four categories:

- 10 1. Short-term On-Peak Purchases
- 11 2. Short-term Off-Peak Purchases
- 12 3. Short-term On-Peak Sales
- 13 4. Short-term Off-Peak Sales

14 Within each category, the weighted average price was calculated. These average prices
15 were multiplied by the Company's energy position (deficit or surplus) during on-peak and off-
16 peak hours. The purchase price is used when the Company is deficit and the sales price is used
17 when the Company is surplus. The transactions included in the average prices have been
18 provided to the Commission as part of the supporting work-papers with each month's deferral
19 calculation.

20 Q. Do the average short-term purchases and sales include transactions that were
21 made for non-system/commercial trading?

22 A. No. The average purchase and sales prices are calculated from purchases and
23 sales made to cover system deficits or sell system surpluses. The purchases and sales include
24 monthly and quarterly block purchases and sales and all pre-scheduled (day ahead) and real-time
25 purchases and sales. Excluded are the monthly and quarterly block trades that were made for
26 commercial trading purposes with the intention of covering with another purchase or sale.

1 Q. How did the actual short-term purchase and sale prices compared to the
2 authorized and Mid Columbia index prices for the period July 2000 through December 2000?

3 A. The Company's actual short-term purchased power prices have been much
4 higher than the authorized prices from the last general rate case but lower than Mid Columbia
5 daily index prices for the months of July 2000 through November 2000. Exhibit ____ (WGJ-2)
6 shows the actual purchase prices used in the power cost deferral calculations in comparison to
7 Mid Columbia index prices and the authorized short-term energy prices.

8 Q. What expenses and revenues are included in the Authorized Net Expense?

9 A. The Authorized Net Expense includes the net purchased power expense plus fuel
10 costs included in Avista's last general rate case. The net power purchase expense is the short-
11 term purchases less short-term sales. Fuel expenses include the coal and wood fuel expense at
12 Colstrip and Kettle Falls, respectively, and the natural gas fuel expense at Rathdrum and
13 Northeast.

14 Q. Does the Authorized Net Expense include all the adjustments made by the
15 Commission in its final rate order on Avista's general rate case?

16 A. Yes it does. The Authorized Net Expense includes all of the power supply
17 related revenues and expenses as approved by the Commission in its final order. These
18 adjustments and their amount are shown in Exhibit ____ (WGJ-3).

19 Q. Please explain the Bellingham Cold Storage Margin adjustment in August and
20 September.

21 A. The Bellingham Cold Storage Margin adjustment represents the additional value
22 created by Avista in receiving approval to run the Northeast turbine for 30 days in August and
23 September and selling 11 MW of the output of the plant. Air emission permits limit the number
24 of hours that Northeast turbine can operate in a twelve month period. Avista received a 30-day
25 exemption to its total hour limits on the plant if some of the output was sold at a reasonable price

1 for use by Bellingham Cold Storage¹. The margin adjustment in the deferrals is the difference
2 between the revenue received from the sale and the cost of fuel to generate the power sold. Any
3 additional generation not sold for the use by Bellingham Cold Storage, and the fuel to generate
4 that power, was included in the actual generation and fuel expense in the deferral calculation.
5 Customers benefited both from the direct margin on the sale and the reduction in net purchase and
6 fuel expense from the additional generation. The sale and additional generation from the
7 plant reduced the power cost deferrals by almost \$2 million. The Company retained no benefit
8 from the Washington allocated portion of the sale.

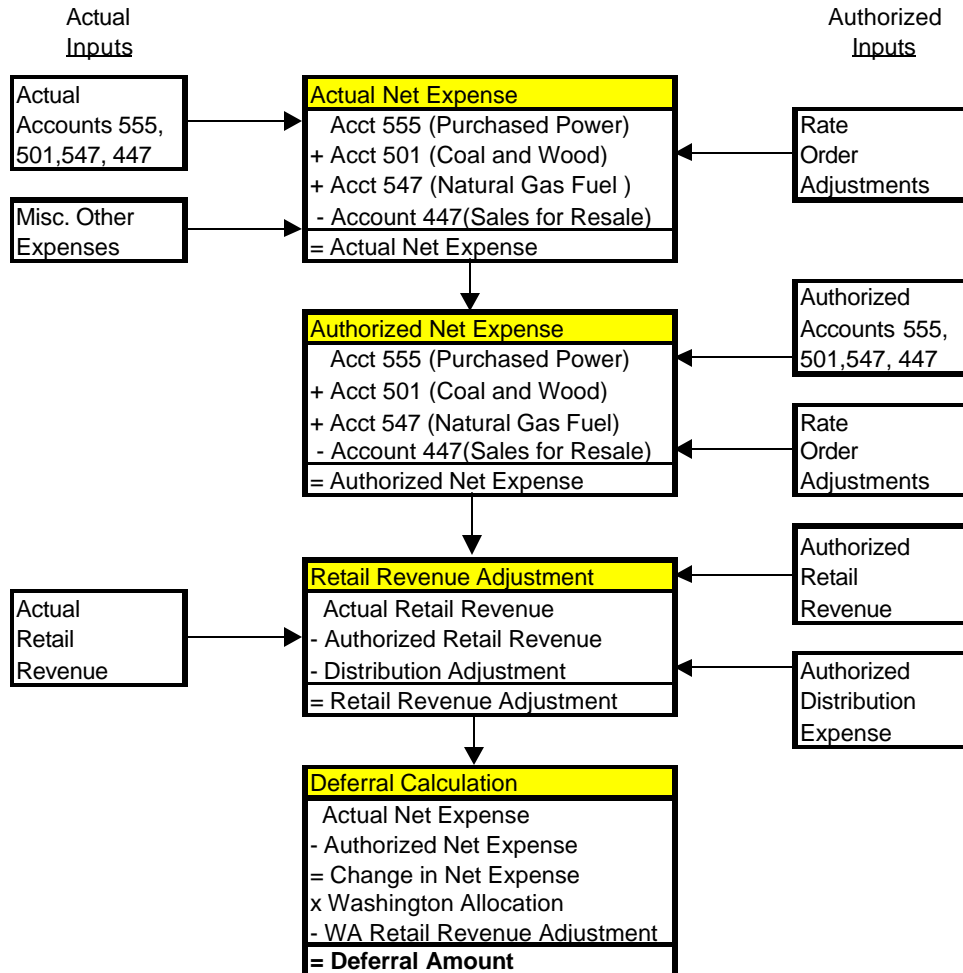
9 **IV. Description of Deferral Mechanism December 2000 – September 2001**

10 Q. Please describe the deferral mechanism being used since December 2000.

11 A. The power cost deferral method since December 2000 calculates the increase in
12 power supply expenses based on changes in generation, fuel prices, market prices, retail loads
13 and long-term contract obligations. The primary difference from the prior mechanism is that it is
14 based on a comparison of FERC accounts to determine purchased power expense and wholesale
15 revenues, rather than a modeled calculation of purchase and sales as was done in the July –
16 November 2000 mechanism. Specifically, the current deferral mechanism is based on the
17 difference between actual and authorized amounts in FERC accounts 555 (Purchased Power),
18 501 (Thermal Fuel Expense), 547 (Other Fuel Expense) and 447 (Sale for Resale). The
19 mechanism also includes a retail revenue adjustment to account for changes in retail revenues
20 that are not captured in FERC account 447. This is necessary since increased retail loads would
21 lead to higher power supply purchase expense and reduced retail loads would lead to lower net
22 purchase expenses. A diagram illustrating the current deferral mechanism is shown below.

¹ Avista sold the power to a third party utility, who then made arrangements for sale of the power to Bellingham Cold Storage.

Power Cost Deferral Mechanism December 2000 - September 2001



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The deferral calculations for the period December 2000 through September 2001 are shown on Exhibit ____ (WGJ-4).

Q. How is the Actual Net Expense calculated in the current deferral mechanism?

A. The Actual Net Expense is calculated by summing FERC accounts 555 (Purchased Power) and 501 and 547 (Fuel) and subtracting FERC account 447 (Sales for Resale).

Q. Why are only the four FERC accounts included in the deferral mechanism?

A. These four accounts represent the majority of the net power supply expenses. They are also the accounts that have the greatest volatility and are subject to uncontrollable

1 factors, such as weather, market prices and fuel costs. Other power supply accounts cover areas
2 such as transmission expense and revenues, other expenses and revenues such as headwater
3 benefits expense and revenue, and rents. Expenses and revenues in these accounts are, for the
4 most part, much less volatile and don't vary due to weather or price changes.

5 Q. How was the Authorized Net Expense for these four FERC accounts
6 determined?

7 A. The Authorized Net Expense includes the expense and revenues in each of the
8 four FERC accounts included in Avista's last general rate case. The Authorized Net Expense for
9 the current deferral method is shown in Exhibit ____ (WGJ-5).

10 Q. Were adjustments made to these accounts consistent with the Commission's final
11 rate order on Avista's general rate case?

12 A. Yes. All of the adjustments ordered by the Commission have been incorporated
13 into the Authorized Net Expense. A list of these adjustments and the adjustment amount is shown
14 in Exhibit ____ (WGJ-6).

15 Q. What expenses or revenues are not included in calculating the Actual Net
16 Expense?

17 A. The following system expenses and revenues are not included in each of the four
18 FERC accounts:

19 Account 555 – Purchased Power

- 20 • Wood Power Buyout Amortization (Idaho Allocation)

21 Account 501 – Fuel (Coal and Wood)

- 22 • No exclusions

23 Account 547 – Fuel (Natural Gas)

- 24 • Fuel Cell Gas Expense

25 Account 447 - Sales for Resale

- 26 • PGE Sale Monetization Amortization (Idaho Allocation)

- 27 • Inter-company Transfers

28 In addition to these exclusions, the cost of other measures taken by the Company to reduce power
29 costs that are not normally recorded in these accounts, such as the costs associated with the
30 permission to run Northeast additional hours and other measures I will explain later in my
31

1 testimony. The exclusions for the Wood Power Buyout amortization, the Fuel Cell Gas expense
2 and the PGE Sale amortization are consistent with the Commission's final rate order. The inter-
3 company transfer expenses occur between the generation and transmission areas of the Company
4 and were not included in the Company's normalized power supply expenses in the last general
5 rate case.

6 Q. Why does the current deferral mechanism include a retail revenue adjustment?

7 A. Increased retail load results in increased power supply costs. Likewise, reduced
8 retail loads result in reduced power supply costs. The rise in short-term market prices has
9 resulted in the situation where the Company is forced to purchase power at prices that are higher
10 than the price received when the power is sold to meet increased retail loads. A retail revenue
11 adjustment is necessary because the revenue that the Company receives from retail sales is not
12 included in the calculation of net power supply expense using the four FERC accounts in the
13 power supply deferral calculation. If retail loads are higher than what was used to calculate
14 authorized power supply expenses, then increased retail revenues must be recognized as an offset
15 to the increased power supply expenses.

16 Q. Please explain why it is appropriate to include a revenue adjustment for the
17 difference between actual and authorized retail revenue in the current power cost deferral
18 mechanism.

19 A. Since actual retail load requirements are one of the components that determine
20 the actual power supply revenues and expenses, it is appropriate to include a retail revenue
21 adjustment for the difference between actual and authorized revenue in the amended power cost
22 deferral mechanism. Changes in wholesale sales contracts will be picked up in the calculation of
23 the difference between actual and authorized revenues in Account 447. A retail revenue
24 adjustment also needs to be included to reflect the difference between actual and authorized

1 retail revenue, adjusted for distribution costs to serve load growth. Mr. McKenzie will explain
2 how the revenue adjustment is calculated.

3 **V. Line Item Expenses Deferred**

4 Q. Can you please explain what is included in the line labeled "Northeast CT
5 Emissions/Lease Expense?"

6 A. This expense includes emissions mitigation fees and related costs and lease
7 payments. The mitigation fees are related to Avista's agreement with the Spokane County Air
8 Pollution Authority (SCAPCA) to increase the hours of operation of the Northeast turbine.
9 Part of the fees went to secure other emission mitigation and part went to fund programs to
10 help low-income customer's pay their utility bills. The lease payments included in the
11 deferrals are for the lease of an engine that was used while the plant's engines were being
12 retrofitted with pollution control modifications.

13 Q. What expenses are included in the line labeled "Devil's Gap?"

14 A. The Devils Gap expense in September's deferral includes lease payments and
15 associated use tax for the months of July 2001 and August 2001. Devil's Gap was a 20 MW
16 diesel fired generation facility located northwest of Spokane.

17 Q. What expenses are included in the line labeled "Kettle Falls Bi-Fuel?"

18 A. The Kettle Falls Bi-Fuel expense in September's deferral includes a lease
19 payment for September 2001 and operation and maintenance fees for August and September
20 2001. Fuel expense at the plant was included in Account 547. Also included in September 2001
21 was a transfer of \$34,623 from a capital account to the deferral account for incremental direct
22 installation costs at the Kettle Falls Bi-fuel plant.²

23 Q. Please explain the line labeled "Net Fuel Expense not included in Account 547."

1 A. This line reflects the expense the Company incurred to sell gas that was
2 purchased for the combustion turbine plants. This line item is necessary because under FERC
3 accounting rules the Company cannot book fuel expenses in Account 547 if the fuel was not
4 consumed. Because the Company sold off some the gas purchased for the combustion turbine
5 plants, the purchase expense and sales revenue of the gas was recorded in other accounts (456
6 revenue and 557 expense). The expense included in the deferral is the gain or loss the Company
7 incurred from the resale of the gas.

8 **VI. Components of Power Cost Deferrals**

9 Q. Have you performed any analysis that quantifies the impact of the primary factors
10 driving power supply costs over the period July 2000 through September 2001?

11 A. Yes I have. The analysis calculates the primary factors contributing to the power
12 cost deferrals over the period July 2000 through September 2001. During this period the
13 deferrals totaled \$194,711,351. Interest on the deferral balance is \$4,947,636 bring the total
14 deferral balance as of September 30, 2001 to \$199,658,987. Less \$1,186,864 of small generation
15 fixed costs, which the Company proposes to address in the upcoming general rate case, brings the
16 deferral balance to \$198,472,123.

17 Decreased hydro generation and higher market energy prices contributed to \$290 million
18 of the deferral total. Increased thermal generation decreased deferrals by \$90 million. Other
19 factors, including decreased retail loads, the buy-back program expense, interest and other
20 expenses netted out against each other. The table below shows the major factors contributing the
21 deferral total. The detailed calculations supporting the table are shown in Exhibit ____ (WGJ-7).

² The Company proposes to address the prudence and recoverability of the costs associated with the Devil's Gap and Kettle Falls Bi-Fuel expenses in the upcoming general rate case.

**Contribution to Deferrals
July 2000 - September 2001**

(\$millions)

Hydro Generation	\$197.8
Price Impact	\$91.6
Colstrip	(\$11.2)
Kettle Falls	(\$10.4)
Rathdrum	(\$58.5)
Northeast	(\$10.0)
Retail Loads	(\$16.2)
Buy-back	\$5.5
Other	\$6.2
Interest	\$4.9
Total of Components	\$199.7
Less Small Generation Fixed Costs	(\$1.2)
Total Deferral Balance	\$198.5

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2 Q. What level did the Company's thermal generation plants operate at during the
3 deferral period?

4 A. During the deferral period the Company's four generation plants, Colstrip, Kettle
5 Falls, Rathdrum and Northeast generated an average 363 megawatts. This compares to a total
6 availability of 362 average megawatts. Colstrip and Kettle Falls generated less than their
7 expected total availability, while both Rathdrum and Northeast produced additional generation
8 due to arrangements made by the Company to increase the available hours for these plants.
9 Below is a table showing the total availability and actual generation of the Company's thermal
10 plants over the deferral period.

**Thermal Generation
Total Availability and Actual Generation**

<u>Thermal Plant</u>	<u>Total Availability aMW</u>	<u>Actual Generation aMW</u>	<u>Increased (Decreased) Generation aMW</u>
Colstrip	191	175	-16
Kettle Falls	45	43	-2
Rathdrum	123	131	8
Northeast	3	14	11
Total Thermal Generation	362	363	1

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1 Q. How has the Company operated its hydro system for the benefit of retail
2 customers?

3 A. The Company shapes its available hydro generation into the heavy load hours to
4 maximize its value and to meet retail loads. The majority (69%) of hydro generation during the
5 deferral period was produced during heavy load hours when retail loads are higher and market
6 energy is more expensive. Exhibit No. ____ (WGJ-8) graphically illustrates the shift of
7 hydroelectric generation to heavy load hours and how resources operated to meet retail loads in
8 each month of the deferral period. The differences between the retail load line and the total
9 resources were met with long-term and short-term contract arrangements.

10 Q. Does that conclude your direct testimony?

11 A. Yes.